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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,455	11/07/2001	Masaei Tsurumaki	520373.90239	4308
26710	7590	12/23/2004	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			PASSANITI, SEBASTIANO	
		ART UNIT	PAPER NUMBER	
		3711		

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,455	TSURUMAKI, MASAEI	
	Examiner	Art Unit	
	Sebastiano Passaniti	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on see detailed Office action.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 3 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 3 and 6-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is responsive to communication received 05/28/2004 – Amendment.

Claims 3 and 6-8 remain pending.

Following is an action on the MERITS:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 6-8 STAND rejected under 35 U.S.C. 103(a) as being unpatentable over Viste in view of Kobayashi ('998), Motomiya, Zebelean, Peterson and Taiwan Patent Nos: 055904 and 391359. Specific to claims 3, 6 and 7, Viste discloses the invention substantially as claimed and includes at least two distinct shell pieces (face and crown sections) attached together to form a club head structure and further including a process to remove a thickness from the interior metal shell. Viste lacks an explicit showing of a plurality of shell pieces that specifically include a face shell, crown shell, sole shell and peripheral side shell. In addition, Viste does not specifically mention "blast grinding". Rather, Viste notes that the interior of the striking plate is dimensioned to have grooves through any one of a hot or cold stamping, forging or swaging operation (col. 2, lines 23-28). Each of Kobayashi, Motomiya and Zebelean show it to be old in the art to fabricate a hollow metallic club head using a plurality of

shells that are subsequently welded or otherwise attached together. For example, Kobayashi shows distinct crown, face and sole/side shell pieces (Figure 4). For instance, Zebelean notes that the hollow club head may be formed of two or more pieces may be cast and secured together, with the number of parts directly affecting the cost of the operation (column 5, lines 29-37). By way of another example, Motomiya shows a variety of arrangements wherein the club head may comprise two or three shell pieces formed by forging or casting techniques (Figures 2, 3). In view of the patents to Kobayashi, Zebelean and Motomiya, it would have been obvious to modify the device in the cited art reference to Viste by fabricating the club head from a plurality of shell pieces based upon the specific manufacturing process used and the cost constraints of the head. With respect to the specific, claimed "blast grinding", the reference to Peterson obviates the use of any one of a number of common finishing operations such as grinding and sand blasting (column 1, lines 57-65). In addition, the prior art Taiwanese patents provided by the applicant (IDS received 07/31/2003) disclose that blasting is a common form of grinding used to adjust the thickness of an object. As the applicant indicates that shot or sand material may be used in the blasting operation and since Peterson indicates that sand blasting and grinding are commonly used to improve the appearance of the head, and since the Taiwanese patents reference blasting as a common form of grinding, it would have been obvious to simply take advantage of a blast grinding technique in place of the formats used by Viste to form the internal grooves on the striking plate in order to make use of another commonly available operation that is useful for altering the thickness of an object. Specific to claim 8,

Zebelean obviates the discretionary thickening of the various walls of the club head in order to alter the weight distribution of the head. The claimed arrangement of shell thickness requirements is merely deemed to be an obvious design variant over the Viste reference as modified by the Zebelean device, since it is clear that an infinite number of combinations of shell thicknesses are readily available when assembling a hollow club head. There is no unobvious purpose for the claimed shell thickness of each of the face, sole and crown. In other words, the instant claimed device provides for the shifting and placement of the center of gravity as desired by the club maker. Likewise, the combined teachings of Viste and Zebelean device accord the skilled artisan with the option of relocating the center of gravity as needed.

RESPONSE TO ARGUMENTS

In the arguments received 05/28/2004, the applicant notes the priority date of the instant application in response to the rejection of claims 3 and 6-8 under 35 USC §102(e)/103(a) as being unpatentable over Poynor in view of Kobayashi ('998), Motomiya and Zebelean. In addition, and with respect to the rejection of claims 3 and 6-8 under 35 USC §103(a) as being unpatentable over Viste in view of Kobayashi ('998), Motomiya, Zebelean, Peterson and Taiwan Patent Nos. 055904 and 391359, the applicant contends that the skilled artisan would not have found it obvious to use a blasting process to form the grooves in Viste in view of the extended processing time and resulting expense.

In response to these arguments, applicant's comments on page 3, lines 4-10 of his remarks have been deemed persuasive. Thus, the rejection of claims 3 and 6-8

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under 35 USC §102(e)/103(a) as being unpatentable over Poynor in view of Kobayashi ('998), Motomiya and Zebelean has been overcome.

Insofar as the arguments directed to the rejection of claims 3 and 6-8 under 35 U.S.C. 103(a) as being unpatentable over Viste in view of Kobayashi ('998), Motomiya, Zebelean, Peterson and Taiwan Patent Nos: 055904 and 391359, it is noted that the applicant's comments regarding time and expense are conclusory statements that are unsupported by factual evidence. In this case, the results attained through a blasting operation performed on the Viste device would flow logically from the combined teachings of the prior art. Specifically, and as indicated in the rejections supra, the Peterson reference along with the prior art documents from Taiwan are recognized for their combined teachings of the commonness for using a blasting or grinding operation to shape an object. The fact remains that a grinding or blasting operation is an available resource for the skilled artisan to take advantage of when shaping an object. In this case, the applicant even indicates that shot or sand material may be used in the blasting operation and since Peterson indicates that sand blasting and grinding are commonly used to improve the appearance of the head, and since the Taiwanese patents reference blasting as a common form of grinding, it would have been obvious to simply take advantage of a blast grinding technique in place of the formats used by Viste to form the internal grooves on the striking plate in order to make use of another commonly available operation that is useful for altering the thickness of an object. The combined disclosures of the teaching references would be sufficient to motivate the

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skilled artisan to modify the Viste reference by fashioning the grooves on the interior face portion using a process other than hot or cold pressing, swaging or forging.

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sebastiano Passaniti
Primary Examiner
Art Unit 3711

S.Passaniti/sp
December 17, 2004